

ABSTRACT

A FIBRE REINFORCED METAL ROTOR

5 A fibre reinforced metal compressor disc (42) comprises a hub  
(44), a rim (46) and a diaphragm (48) extending radially  
between the hub (44) and the rim (46). The fibre reinforced  
metal compressor disc (40) comprises a first ring of ceramic  
fibres (52) and a second ring of ceramic fibres (56). The  
10 first ring of fibres (52) is arranged in the hub (44) and the  
second ring of fibres (56) is arranged in the rim (46) of the  
disc (42). The rim (46) of the disc (42) carries a plurality  
of blades (50). This arrangement of the rings of fibres  
(52,56) minimises the weight of the disc, especially for  
15 large radius discs suitable for carrying large blades and  
operating at high rotational speeds.

(Figure 3)